Population and Labor Force Projections for New Jersey: 2008 to 2028

by Sen-Yuan Wu, Division of Labor Market and Demographic Research

Similar to other northern states, New Jersey has had slower population growth than the nation as a whole since the rise of the Sunbelt in the 1970s. More recently, between 2000 and 2008 New Jersey gained 249,000 residents. Although faster than its Middle-Atlantic neighbors (New York +2.6%, Pennsylvania +2.3%), the state's 3.0 percent growth rate during the recent eight-year period was notably less than the nation's 8.2 percent. The differential growth rate between the state and the nation will continue into the foreseeable future. New Jersey's total population is projected to increase by 3.9 percent (or 0.38% per annum) from 8,666,400 in 2008 to 8,999,800 in 2018. In comparison, the nation's population will increase by 10.1 percent (or 0.96% per annum) between 2008 and 2018, according to the US Census Bureau's population projections[1].

Table 1

Total Population: New Jersey and United States, 1900-2028				
	Population		Annualized Growth Rate (%)	
Year	New Jersey	United States	New Jersey	United States
Census				
1900	1,883,669	76,212,168	---	---
1910	2,537,167	92,228,496	3.02	1.93
1920	3,155,900	106,021,537	2.21	1.40
1930	4,041,334	123,202,624	2.50	1.51
1940	4,160,165	132,164,569	0.29	0.70
1950	4,835,329	151,325,798	1.52	1.36
1960	6,066,782	179,323,175	2.29	1.71
1970	7,171,112	203,302,031	1.69	1.26
1980	7,365,011	226,545,805	0.27	1.09
1990	7,730,188	248,709,873	0.49	0.94
2000	8,414,350	281,421,906	0.85	1.24
Estimates				
2008	8,663,398	304,374,846	0.35	0.91
Projections				
2013	8,804,700	319,330,300	0.32	0.96
2018	8,999,800	335,005,200	0.44	0.96
2023	9,166,800	351,018,200	0.37	0.94
2028	9,380,200	367,090,100	0.46	0.90

Source: US Census Bureau and New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research

The annualized average rate of New Jersey's population growth was 0.35 percent between 2000 and 2008, and 0.85 percent during the 1990s. The population of the nation as a whole grew by 0.91 percent per annum and 1.24 percent per annum during the 2000-2008 and 1990-2000 periods, respectively.

The resident population in New Jersey is projected to grow at 0.41 percent per annum from 2018 to 2028. The state's total population will reach 9,380,200 by July 1, 2028. Con-

sequently, New Jersey's share of the nation's total population will shrink somewhat from 2.8 percent in 2008 to 2.7 percent and 2.6 percent, respectively, in 2018 and 2028.

Natural Increment is the Major Source of New Jersey's Population Growth

There are two components of population growth – natural increment (surplus of births over deaths) and migration (domestic and international). During the first eight years in this decade, the number of births exceeded deaths by 40,700 per year, on average, in New Jersey. Meanwhile, the state gained 43,900 immigrants from abroad per year but lost 51,900 residents to other states per year, on average. Since the state's net gain from international immigration was no longer large enough to offset its loss due to domestic migration, natural increment has become the major source of the population growth. As American's longevity continues to increase and the fertility rate of American women remains relatively high among industrialized nations, natural increment is projected to continue to be a very important source of population growth for the state and, to a lesser extent, the nation.

Table 2

Components of Population Change: New Jersey, 2000-2028			
Time Period	Total Change	Natural Increment	Net Migration
2000-2008	249,020	335,619	-65,670
2008-2018	336,400	369,800	-33,400
2018-2028	380,400	322,300	58,100
Source: US Census Bureau and New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research			

According to the US Census Bureau's recent population estimates, the influx of foreign immigrants to New Jersey (international migration) is dwindling gradually while the outflow of New Jersey residents to other US states (domestic migration) is on the rise. A quick turnaround is unlikely during an economic downturn or a slow recovery. A modest negative net migration is thus projected for the 2008-2018 period due, at least partly, to the projected slow employment growth. Natural increment will continue to dominate the state's population growth from 2008 to 2018.

As most baby boomers are expected to leave the nation's labor force during the 2018-2028 period, international and/or domestic migrants will be needed to sustain the state's continuing economic and employment growth. Thus, a moderate positive net migration is projected to account for about 15 percent of New Jersey's population growth from 2018 to 2028.

Elderly Population will be the Fastest Growing Age Group

As the nation's largest birth cohort since the 1960s, the "baby boomers" (persons born between 1946 and 1964), accounted for 31 percent of the state's total population in 1990, and 29 percent in 2000. They were 44-to-62 years old in 2008. As the cohort ages, the state's elderly population (65 years and over) will grow substantially from 1.15 million in 2008 to 1.42 million in 2018 and 1.81 million in 2028. Senior citizens accounted for 13.3 percent of the state's total population in 2008. By 2028, almost one in every five residents (19.3%) will be senior citizens in New Jersey. Nationally, the proportion of elderly population was 12.7 percent in 2008, and is projected to reach 15.3 percent in 2018 and 18.8 percent in 2028.

"Baby boomers" are projected to be outnumbered by their children's generation — the "baby boom echo" cohort (mostly born between 1977 and 1994) in 2018. Due to the projected
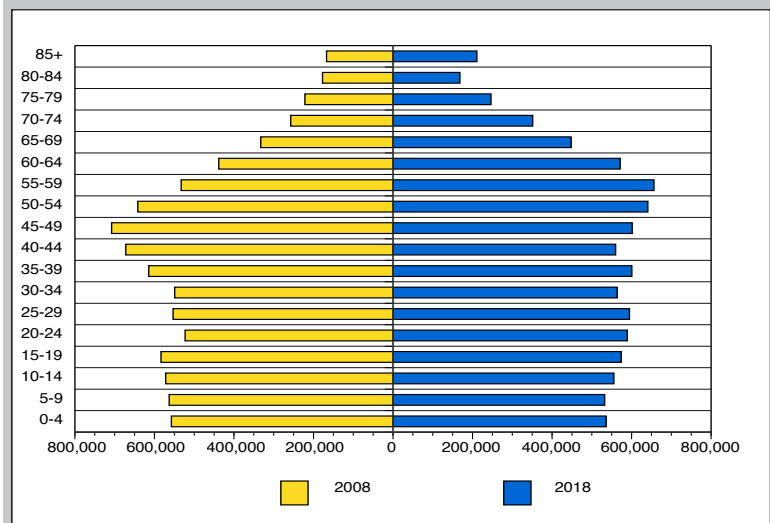
differentials in mortality and migration rates, by 2028, the "baby boom echo" cohort will comprise more than 23 percent of New Jersey residents while the share of "baby boomers" will shrink to less than 14 percent.

New Jersey's primary school age population (5 to 13 years old) increased solidly (+2.1% per annum) during the 1990s due to the entrance of the "baby boom echo" cohort. The same force drove substantial growth of the secondary school age population (14 to 17 years old) between 2000 and 2008. However, the state's school age population (5 to 17 years old) is projected to decrease somewhat

Chart 1

Population by Age: New Jersey, 2008 and 2018

Source: US Census Bureau and New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research

(-4.3%) between 2008 and 2018 when the children of the "baby bust" cohort[2] will be the major source of school age children, but will stabilize between 2018 and 2028.

After declining in the 1990s, the college-age population and/or new entrants to the labor force (persons 18-24 years old) rebounded in 2000-2008. The momentum, fueled by the "baby boom echo" cohort, will continue to the 2008-2018 period, but abate somewhat after 2018.

Table 3

New Jersey Population by Age Group: 1990-2028					
	Census on April 1,		Estimate 2008	Projections to July 1,	
Age group	1990	2000		2018	2028
Total	7,747,750	8,414,350	8,663,400	8,999,800	9,380,200
Under 5	547,600	563,800	557,400	535,900	578,300
5 to 13	878,300	1,082,100	1,017,600	976,700	982,800
14 to 17	403,000	441,700	478,400	455,400	437,000
18 to 24	778,400	676,600	745,100	818,700	807,000
25 to 39	1,985,100	1,917,000	1,716,500	1,759,000	1,905,700
40 to 54	1,411,400	1,866,100	2,021,700	1,802,300	1,714,200
55 to 64	718,400	754,000	971,000	1,227,400	1,142,000
65 & over	1,025,500	1,113,100	1,155,800	1,424,500	1,813,300
Baby Boom	2,423,800	2,447,600	2,312,400	2,014,000	1,260,500
Baby Boom Echo	1,425,900	1,985,300	1,996,500	2,100,800	2,172,000

Note: Some "Baby Boom Echo" generation were born after 1990.

Source: US Census Bureau and New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research

Growth of the Hispanic Population Will Continue to Outpace Non-Hispanics in New Jersey

Latinos or persons of Hispanic origin (who may be of any race) grew by more than 26 percent between 2000 and 2008, while persons not of Hispanic origin declined in New Jersey. That is, without the hefty growth of Hispanics, New Jersey's population would have declined from 2000 to 2008. Hispanics are projected to continue to increase substantially in New Jersey due to the sizeable influx of immigrants from Latin America and relatively high fertility rates of Hispanic women. Hispanics have outnumbered blacks (or African Americans) and became the state's largest minority group earlier in this decade. They are projected to account for 96.6 percent of the state's 2008-2018 population growth and comprise 19.3 percent of the state's total population in 2018. In comparison, African Americans' share of the state's population will be 14.4 percent in 2018. In 2008, the Hispanic and African American shares of New Jersey's population were 16.2 percent and 14.4 percent, respectively.

More than one in every five (22.2%) New Jerseyans will be Latinos by 2028. In contrast, the state's share of white, non-Hispanic population will diminish to 51.3 percent by 2028, from 61.8 percent in 2008.

Asian's Share in the State's Population is Projected to Increase Substantially

New Jersey has been one of the major destinations of Asian immigrants since the 1970s. The Asian population experienced a 34.6 percent growth in New Jersey between 2000 and 2008, compared with the -0.01% decline of whites and 3.2 percent growth of blacks. They are projected to continue to increase considerably faster than their white and black counterparts from 2008 to 2018. Consequently, Asians will account for about 10 percent of the state's total population by 2018, up from 7.7 percent in 2008 and 5.9 percent in 2000, while the share of whites will shrink to 73.2 percent by 2018, down from 76 percent in 2008. The proportion of New Jersey's population who are black or African American is projected to remain unchanged at 14.4 percent from 2008 to 2018. The multiracial (two or more races) population also had a phenomenal 34.7 percent gain from 2000 to 2008, but from a small population base. They will account for 1.8 percent of New Jersey's total population by 2018, up from 1.4 percent in 2008.

Table 4

Racial/Ethnic Composition of New Jersey Population (%): 1990-2028

Race/Ethnicity	Census on April 1,		Estimate	Projections to July 1,	
	1990	2000	2008	2018	2028
All Races	100.0	100.0	100.0	100.0	100.0
White	82.3	78.3	76.0	73.2	70.4
Black	13.9	14.4	14.4	14.4	14.3
Asian	3.6	5.9	7.7	10.0	12.5
Other Races	0.2	0.4	0.4	0.5	0.6
Multiracial	---	1.1	1.4	1.8	2.3
Hispanic	9.7	13.3	16.2	19.3	22.2
White, Non-Hispanic	73.9	66.6	61.8	56.5	51.3

Note: "Other Races" includes American Indian, Alaska Native, Native Hawaiian and other Pacific Islander. "Multiracial" refers to persons of two or more races. Hispanic origin is not a race. Persons of Hispanic origin may be of any race.

Source: US Census Bureau and New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research

The share of the state's Asian population will increase to 12.5 percent by 2028 while the white's share will shrink further to 70.4 percent and the black's share will diminish fractionally to 14.3 percent by then. The multiracial persons' share is also projected to increase remarkably to 2.3 percent by 2028.

New Jersey's Sex Ratio is Projected to Increase Gradually

Females outnumber their male counterparts in New Jersey. The state's sex ratio (number of males per 100 females) was 92.2, 93.5 and 94.3, respectively, according to the 1980, 1990 and 2000 Censuses. As the life expectancy of males is expected to continue to edge closer to that of females, and the state's fast growing Hispanic population will continue to have a high sex ratio (greater than 100), the male population is projected to grow at a pace slightly faster than its female counterpart in New Jersey during the 21st century. Consequently, the state's sex ratio is projected to continue to increase from 96.0 in 2008 to 97.2 in 2018 and 97.9 by 2028.

Table 5

Sex Ratio (Number of Males per 100 Females): New Jersey, 1980-2028		
Year	Male Population	Female Population	Sex Ratio
1980	3,533,012	3,831,811	92.2
1990	3,744,728	4,003,022	93.5
2000	4,082,813	4,331,537	94.3
2008	4,243,800	4,419,600	96.0
2018	4,435,300	4,564,500	97.2
2028	4,641,300	4,738,900	97.9

Source: US Census Bureau and New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research

Sex ratio decreases by age. In New Jersey, the sex ratio was greater than 100 (more males than females) among the population 0-39 years old in 2008, while there were more females than males in the 40 and over group. In the oldest age group (85 and over), females outnumber males by a wide margin of 2.3 to 1. New Jersey's sex ratio is projected to remain above 100 for the 0-44 population in 2018 and the 0-54 age group in 2028.

New Jersey's Civilian Labor Force is Projected to Grow Modestly

The rate of New Jersey's civilian labor force growth was triple its population growth rate during the 1980s when the "baby boomers" entered the labor market en masse. However, the state's labor force grew slower than its population between 1990 and 2000 when the "baby bust" generation was the major source of new entrants to the labor market. As the "baby boom echo" generation started to join the nation's labor force, New Jersey's labor force growth out-paced its population growth, again, from 2000 to 2008.

Scarce job opportunities during the economic recession will not only exacerbate the un-employment rate but also discourage labor force participation. The current bleak economic outlook and anemic employment growth projected for the first half of the 2008-2018 period leads to slow labor force growth in New Jersey. The civilian labor force is projected to increase by 3.2 percent (or 0.32% per annum) in New Jersey, from 4,515,000 in 2008 to 4,661,000 in 2018. During the same ten-year period, a 3.9 percent (or 0.38% per annum) gain in population is projected for New Jersey. The state's population will increase by another 4.2 percent (or 0.41% per annum) from 2018 to 2028 while its labor force will grow by 2.9 percent (or 0.29%

per annum). The mass departure of the "baby boomers" from the labor force between 2018 and 2028 will indisputably contribute to the period's lackluster labor force growth.

Changes in Population and Labor Force: New Jersey, 1980-2028

Year	Population	Labor Force
Numeric Change		
1980-1990	382,739	581,445
1990-2000	666,600	135,800
2000-2008	249,048	274,500
2008-2018	336,400	146,000
2018-2028	380,400	135,300
Annual Growth Rate (%)		
1980-1990	0.51	1.54
1990-2000	0.83	0.33
2000-2008	0.35	0.76
2008-2018	0.38	0.32
2018-2028	0.41	0.29

Source: US Census Bureau and New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research

The Labor Force in New Jersey is Projected to Comprise More "Older Workers"

New Jersey's "younger workers" pool (labor force under 35 years of age) shrank while the "prime age" group (labor force 35-54 years of age) expanded during the 1990s when matured "baby boomers" were succeeded by the smaller "baby bust" cohort. A hefty growth (+35.2%) of the "older workers" group (labor force 55 years or older) is projected for the 2008-2018 period, as the "baby boomers" continue to age. The share of "older workers" in the state's labor force is projected to increase to 25 percent by 2018 from 15 percent in 2000. The "older workers" will continue to comprise of more than one in every four New Jersey workers by 2028.

While the "baby bust" generation is expected to cause the decline of the labor force members that are 35-54 years old and 45-64 years old in 2008-2018 and 2018-2028, respectively, the number of younger workers (35 or younger) in the state is projected to continue to increase during both the 2008-2018 (+4.4%) and the 2018-2028 (+5.8%) periods.

Civilian Labor Force by Age: New Jersey, 1990-2028

Age	Census on April 1, 1990	2000	Estimate 2008	Projections to July 1, 2018	2028
All ages	4,104,700	4,240,500	4,515,000	4,661,000	4,796,300
16-24	643,400	544,800	554,100	572,600	570,500
25-34	1,132,100	935,400	907,500	952,600	1,044,000
35-44	1,009,900	1,175,400	1,063,900	949,900	1,023,000
45-54	705,300	947,200	1,125,400	1,017,400	944,100
55-64	461,100	479,500	665,700	858,500	805,100
65+	152,900	158,400	198,400	310,000	409,600
55 & over	614,000	637,800	864,100	1,168,500	1,214,700

Note: The 1990, 2000 and 2008 labor force figures were estimated based on decennial censuses, American Community Survey (ACS) and Local Areas Unemployment Statistics (LAUS) data published by the US Bureau of Labor Statistics.

Source: US Census Bureau and New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research

New Jersey's Labor Force Growth will be Dominated by Hispanics and Asians

New Jersey's Hispanic and Asian labor forces have grown substantially faster than their non-Hispanic and white or black counterparts in the 1980s and 1990s. They are projected to continue to lead the state's labor force growth, parallel to the projected population growth trend. Asians accounted for 41 percent of the 2000-2008 labor force growth in New Jersey, and are projected to fuel 78 percent of the state's labor force growth during the 2008-2018 period. Between 2018 and 2028, the growth of Asians alone in the state's labor force (+159,900) will be more than enough to offset the decline of whites (-77,600) and to foster moderate growth of the New Jersey workforce.

Table 8

Labor Force Growth by Sex, Race and Hispanic Origin: New Jersey, 2000-2028

	Share of Labor Force Growth		
	2000-2008	2008-2018	2018-2028
Total change	274,500	146,000	135,300
Male	51.7%	46.2%	49.6%
Female	48.3%	53.8%	50.4%
White	39.4%	-18.8%	-57.3%
Black	11.0%	26.3%	15.3%
Asian	40.9%	78.5%	118.2%
Other Races	3.7%	1.9%	2.5%
Multiracial	5.0%	12.1%	21.4%
Hispanic	51.5%	95.0%	133.2%

Note: "Other Races" includes American Indian, Alaska Native, Native Hawaiian and other Pacific Islander. "Multiracial" refers to persons of two or more races. Hispanic origin is not a race. Persons of Hispanic origin may be of any race.

Source: US Census Bureau and New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research

Hispanics contributed more than one-half (51.5%) of the state's 2000-2008 labor force gain. They are projected to comprise 95 percent of the state's labor force growth from 2008 to 2018. Hispanics will account for all the growth of New Jersey's labor force from 2018 to 2028, as the non-Hispanic labor force is projected to decline. The number of white, non-Hispanics in the state's labor force, in particular, is projected to decline substantially between 2008 and 2028. Their share in the state's labor force is projected to reduce to 51.3 percent by 2028, from 62.8 percent in 2008.

The shares of individual racial/ethnic groups in the state's labor force will inevitably be altered by the disparity of growth rates among them. The Asian's share of the state's labor force will increase from 8.5 percent in 2008 to 10.7 percent in 2018 and 13.7 percent in 2028, while African American's share will hover around 13 percent throughout the projection years. The Hispanic share of the state's labor force will be elevated from 15.9 percent in 2008 to 18.4 percent in 2018 and 21.6 percent in 2028.

About the Projections

The 2008-2028 population and labor force projections were developed by the New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research as part of the department's economic and demographic projections series. The projections series include employment by industry; employment by occupation; population by age-race-sex and Hispanic origin; and civilian labor force by age-race-sex and Hispanic origin. These projections share input data and assumptions and are therefore consistent with each other. These data supersede all projections previously issued by this department.

The race and Hispanic origin groups included in the projections are white, white non-Hispanic, black (or African American), Asian, "other races", multiracial (two or more races), Hispanic white and Hispanic nonwhite. The "other races" include American Indian, Alaska Native, Native Hawaiian and other Pacific Islander. Hispanic origin is not a race. Persons of Hispanic origin (or Latinos) may be of any race. The race categories used in the projections are consistent with the US Office of Management and Budget's (OMB) 1997 Directive. Unlike decennial censuses where an unspecified "some other races" category was allowed, every person has to belong to one or more of the five specified race categories – White, Black, Asian, American Indian and Alaska Native, Native Hawaiian and other Pacific Islander – according to the OMB directive.

In the projections, data by the same racial and ethnic groups were tabulated for both population and labor force. However, labor force is divided into seven age groups while population consists of 18 age groups. Because of rounding, there may be small discrepancies between projection distributions and totals.

For the first time, a separation of Asians from American Indian and Pacific Islander was attempted in the statewide projections in order to provide more population details to data users. However, due to a small population base in most counties, American Indian and Pacific Islander population will still be included in the "other races" category, together with Asians, in the county projections.

In response to user's requests, the projections were made available for the years of 2013, 2018, 2023 and 2028. In case population for other years (e.g., 2020, 2025 etc.) are needed, and the long-term population trend, not the short term variation is of concern, users are advised to interpolate the projections to meet their needs.

The Economic-Demographic Model was used in preparing population and labor force projections due to its great scope of the input information (includes both economic and demographic data) and its consistency with the employment projections, which were developed as a part of this department's Projections 2018 Series. The state's population was also projected based on three additional projection models – Historical Migration Model, Zero Migration Model and Linear Regression Mode – for illustrative and comparative purposes. Projections based on those models are not presented in this article but are available upon request.

The numbers presented are projections, not forecasts or predictions. A projection is the measurement of a future condition that would exist if the assumptions and procedures of the method proved to be empirically valid in the future. Projections may assume continuation of past conditions, present conditions or trended changes in historical conditions. They may also assume entirely new growth rates. Given the method and the assumptions, a projection

is always correct if the operations of the projection method are carried out without error. The number of possible projections for any given population is therefore infinite. A forecast, on the other hand, is a projection that is also a judgmental statement concerning the expected measurement of future conditions; it is a prediction. All forecasts are projections, but not all projections are forecasts. Again, we prepared projections, not forecasts[3].

The projections prepared by this department are not "policy" projections and should not be interpreted as goal or policy oriented. They are not intended to constrain or to advocate specific levels of growth in the state. All projections are presented as baseline, that is, independent of exogenous public or private interventionist activities of an unusual, unforeseen, or undocumented nature or magnitude. They are based primarily on identifiable demographic and economic secular trends which have been implicitly or explicitly incorporated into the models. The greatest value of the projections is as a reference framework for planning, research, program evaluation and considerations for alternative growth scenarios which could be achieved through greater or less resource development.

Data Availability

The *Population and Labor Force Projections for New Jersey: 2008 to 2028* including detailed data tables and methodology descriptions are available on the Labor Planning and Analysis Web site < http://lwd.dol.state.nj.us/labor/lpa/dmograph/lfproj/lfproj_index.html >. For more information about population projections for New Jersey, contact the New Jersey Department of Labor & Workforce Development, Division of Labor Market and Demographic Research, PO Box 388, Trenton, NJ 08625-0388. Telephone: (609) 292-0076 or e-mail: Sen-Yuan.Wu@dol.state.nj.us.

Footnotes:

1. *US Bureau of the Census: "U.S. Population Projections by Age, Sex, Race, and Hispanic Origin," August 2008.*
2. *The "baby bust" cohort (also known as the "generation x") refers to persons born between 1965 and 1976.*
3. *Donald B. Pittenger, Projecting State and Local Populations (Cambridge, MA: Ballinger Publishing Co., 1976) and Richard E. Klosterman, Community Analysis Planning Techniques (Savage, MD: Rowman and Littlefield, 1990).*